NEC

LCD REAR PROJECTION MONITOR

INSTRUCTION MANUAL



LCD PROJECTION - MONITOR

Special Features

LCD Rear Projection Monitor NRP-60LCD1

Wide screen with the highest picture quality! Experience the reality and feel the amazing sensation!

•Reality and sensation experienced only in theaters!

Small crystal liquid particles compounding the wide screen LCD Projection Monitor provides a clear image and higher quality of picture!

•Wide Screen! Minimized Space!

LCD Projection Monitor is easy to install and move around since it is much smaller and lighter compared to an original CRT type monitor.

Exceptionally bright engine

The LCD Rear Projection Monitor NRP-60LCD1 has improved its light source by using 130W, which makes the images of the screen much clear and much brighter than just a normal LCD Projection Monitor.

•LCD panels of 2.76 million pixels

The LCD Rear Projection Monitor NRP-60LCD1 has three separate LCD panels of 2.76 million pixels that help to generate sharper, clearer and brighter images.

No magnetic influence

The LCD type Monitor is not affected by magnetic field as that of the CRT type projection monitor; thus, distortion of the picture quality or flickering of the image does not occur. It may be used with oversized speakers, or installed in a place where Monitor installation was previously undoable.

Lenticular Screen

The Nec lenticular screen of 0.155mm pitch contains an anti-reflection coating that improves its contrast, and consequently, its picture and color quality at the least parts of the edge with the 2.76 million color pixels.

•Dolby Surround Pro Logic

The LCD Rear Projection Monitor NRP-60LCD1 contains the highest quality amp, which provides the richest sound only of Dolby Surround Pro Logic without any additional connection other than the usual speaker systems (Woofer, Surround R. L).

****This user's manual contains important safeguards and instructions that must be followed by the user for its proper usage and maintenance.**

Please read the instructions carefully, and keep the manual in a safe place for future reference.

ACCESSORIES







Batteries 1 pair

Air Filter

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LCD PROJECTION - MONITOR

Special Features

Your new HD Upgradeable big screen monitor has many special features that makes a perfect addition to your home entertainment system. Below we have highlighted a handful.

NRP-60LCD1

NRP-60LCD1 has impressive ability to display both video and computer images with the highest level clarity that has never been previously offered to the home theater. The advanced circuitry has the ability to accept:

- Conventional video (480i), (576i)
- Progressive scan video (480p), (576p)
- Both 1080i, 720p and 480p HDTV images
- VGA, S-VGA, XGA, SXGA and UXGA computer graphics

HD Upgradeable

With the use of an optional DTV receiver, your NEC big screen can display high definition pictures.

Wide Screen Picture Format

You will be able to view pictures as the movie directors intended you to see them. Both the DTV and DVD supporting the wide screen format will enable you to enjoy a sensation that can only be experienced in theaters and now in the comfort of your home.

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CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER

(OR BACK).

NO USER-SERVICEABLE PARTS INSIDE.

REFER SERVICING TO QUALIFIED SERVICE PERSONNEL.



The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

WARNING:

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

CAUTION:

TO PREVENT ELECTRIC SHOCK, MATCH WIDE BLADE OF PLUG TO WIDE SLOT, FULLY INSERT.

LCD PROJECTION - MONITOR

IMPORTANT SAFEGUARDS

Please read the following safeguards for your Monitor and retain for future reference. Always follow all warnings and instructions marked on the monitor.

1. Read, Retain and Follow All Instructions

Read all safety and operating instructions before operating the Monitor. Retain the safety and operating instructions for future reference. Follow all operating and use instructions.

2. Heed Warnings

Adhere to all warnings on the appliance and in the operating instructions.

3. Cleaning

Unplug the Monitor from the wall outlet before cleaning. Do not use liquid, abrasive, or aerosol cleaners. Cleaners can permanently damage the cabinet and screen. Use a lightly dampened cloth for cleaning.

4. Attachments and Equipment

Never add any attachment and/or equipment without approval of the manufacturer as such additions may result in the risk of fire, electric shock or other personal injury.

5. Water and Moisture

The apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on the apparatus.

6. Accessories



Do not place the Monitor on an unstable cart, stand, tripod, or table. The Monitor may fall, causing serious injury to a child or adult and serious damage to the Monitor. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with the Monitor. Any mounting of the Monitor should follow the manufacturer's instructions, and should use mounting accessories recommended by the manufacturer. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.

7. Ventilation

Slots and openings in the cabinet are provided for ventilation and to ensure reliable operation of the Monitor and to protect it from overheating. Do not block these openings or allow them to be obstructed by placing the Monitor on a bed, sofa, rug, or other similar surface. Nor should it be placed over a radiator or heat register. If the Monitor is to be placed in a rack or bookcase, ensure that there is adequate ventilation and that the manufacturer's instructions have been adhered to.

8. Power Source

This Monitor should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supplied to your home, consult your appliance dealer or local power company.

9. Power-Cord Protection

Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plugs, convenience receptacles, and the point where they exit from the Monitor.

10. Lightning

For added protection for this Monitor during a lightning storm, or when it is left unattended and unused for a long periods of time, unplug it from the wall outlet and disconnect or cable system. This will prevent damage to the Monitor due to lightning and power-line surges.

12. Overloading

Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.

13. Object and Liquid Entry

Never push objects of any kind into this Monitor through openings as they may touch dangerous voltage points or short-out parts that could result in fire or electric shock. Never spill liquid of any kind on or into the Monitor

14. Servicing

Do not attempt to service this Monitor yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified service personnel.

15. Damage Requiring Service

Unplug the Monitor from the wall outlet and refer servicing to qualified service personnel under the following

- (a) When the power-supply cord or plug is damaged.
- (b) If liquid has been spilled, or objects have fallen into the Monitor.
- (c) If the Monitor has been exposed to rain or water.
- (d) If the Monitor does not operate normally by following the operating instructions. Adjust only those
- that are covered by the operating instructions as an improper adjustment of other controllers may result in damage and will often require extensive work by a qualified technician to restore the Monitor to its normal
- (e) If the Monitor has been dropped or the cabinet has been damaged.
- (f) When the Monitor exhibits a distinct change in performance this indicates a need for service.

16. Replacement Parts

When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original part. Unauthorized substitutions may result in fire, electric shock or other hazards.

17. Safety Check

Upon completion of any service or repair to the Monitor, ask the service technician to perform safety checks to determine that the Monitor is in safe operating condition.

18. Heat

The product should be situated away from heat sources such as radiators, heat registers, stoyes, or other products (including amplifiers) that produce heat.

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Warning

This section must be read carefully and followed by the user prior to the operation of the product.

The manual states important instructions for the user's own safety, and the proper operation of the product.



Ignoring or disregarding the contents of this section and warning improper operation of the product may result in the person's death or serious injury.

In case of an accident, please unplug the unit from the outlet immediately.

To reduce the risk of electric shock, do not remove cover or back. No user -serviceable parts inside. Refer to qualified service personnel for repair.



To prevent fire and damages to the product. unplug the unit from the outlet during lightning storm, or when it is left unattended and unused for a long period of time.



Slots and openings in the case are provided for ventilation to ensure reliable operation of the product. Never put in any item-such as a coin, paper, match-through these openings since it may touch dangerous voltage points



Take the plug when unplugging the unit from the outlet. The cord may cause fire or electric shock if damaged.



Do not put any object that contains water - such as flowerpot - on the unit. The water may penetrate into the unit, and be a cause of fire or hazardous electric shock



Do not put on or use the product near water and moisture-such as in a bathroom. washbowl, etc. It may be a cause of fire and electric shock hazards



Do not let children hang on or climb on the product since it may be a cause of serious injury.



Do not place the product in a lean or unstable place since it may cause a serious injury to a person, as well as



Caution

Please keep the user's manual in a safe place for future reference.



Ignoring or disregarding the contents of this section i Caution and improper operation of the product may result in the person's death or serious injury.

This section must be read carefully and followed by the user when installing and transporting the product,

Do not put volatile substance-such as benzene, naphtha- near the product since it may cause a change in the product/s color.



Do not touch the power cord with moisturized or watery hands when plugging to or unplugging from the outlet since it may be a cause of electric



Do not expose the product in a dusty or moisturized place since it may be a cause of malfunctioning.



Do not spill water or drop the remote

controller since it may be a cause of

malfunctioning.

Place the Monitor far away from the view since it may cause damage in your eyesight.



The product should be situated away

from any heat source-such as radiators,

heat registers, stoves, or other products

that produce heat.

Refer servicing to qualified service personnel for cleaning at least once a year since dust inside the Monitor set may be a result or fire and malfunctioning of the product.



Do not put on any heavy item on the power cord since it may result in fire or hazardous electric shock if the cord is



Do not cover the top of the Monitor set. Ventilation will be prevented, and it may be a cause of fire if the product is internally overheated.



Unplug the power from the outlet and all the related connections from the unit to prevent electric shock. At least two people must work together to move the Monitor set when transporting to prevent the Monitor from falling, and consequently, any serious injury or





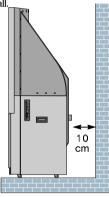
LCD PROJECTION - MONITOR

Cautions in Installation and Conveyance

Caution

When Installing the Unit.

Please maintain an approximate distance of 10cm from the wall when installing. It may be a cause of fire or shutting off of the Monitor set since the unit may be overheated if it is too close to the wall.





When Moving or Transporting the Unit.

(1)Have at least two people transporting the unit for your own safety. (2)Please grab the parts of the unit as indicated in the illustration.

* Transporting the unit grabbing places of the unit other than the ones indicated in the picture, result in malfunctioning, destruction, and serious injury. You must grab the handle provided with one hand, and grab the front panel with the other hand to prevent the unit from falling down. (Please do not try to lift up the product since the unit provides casters for easy convevance.)



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Maintenance Tips

Air Filter Cleaning

***Caution**

- ①Unplug the power cord from the outlet before cleaning.
- (2)When vacuuming the filter, please do so from the outmost surface.
- (3) The Monitor set will not operate if the air filter has not been properly assembled.
- (a)Change the air filter if damaged or wet.

Please clean the filter periodically for the product's proper functioning and operation. Particularly, more frequent cleaning may be necessary if the Monitor is installed and utilized in a dusty place. Please use the following steps when cleaning it up.

Turn off the MONITOR set

- Use either the remote controller or the power button to turn off the Monitor. When the power is off, the unit will stand by momentarily for cooling.
- Wait until the power lamp at the front panel turns red.

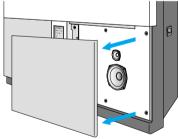
2

Disconnect the Unit Completely

• When the cooling process of the mercury lamp ends, unplug the power cord from the outlet.

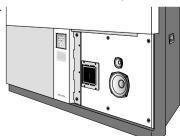
Pull off the Speaker Grill at the Front Panel

 Refer to the illustration provided below. Pull off the speaker grill of the right side of the panel. Begin taking off from the most exterior part.



Clean the filter

• Do not remove the filter from the unit, and use the vacuum cleaner to remove the



LCD PROJECTION - MONITOR

Air Filter Change

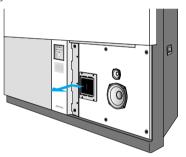
***Cautions**

- •When changing the air filter, please do so after having brushed away dust on the set.
- Do not let the dust get into the unit since the product contains "short-out" parts.
- Do not detach the filter sponge fixed on the filter cover.
- Do not clean the filter sponge with water since it may be a cause of blocking its holes.
- You must fit in the filter cover properly to the set. If not, the unit will not power on.
- It is essential to change the air filter at the time of changing the lamp.



Pull off the Speaker Grill at the Front Panel

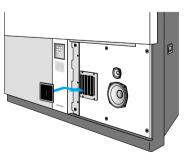
• Pull off the speaker grill of the right side of the panel as the way you have done when cleaning the air filter. Hold the filter knob and remove it as in the direction illustrated.





Install the New Air Filter

• Fit in the new air filter and adjust the speaker grill properly.



Lamp Change

The screen brightness may be reduced or the light bulb may be shattered when the lamp has been used for a long period of time.

In this case, you must purchase the lamp DSJ-LF10 from Nec Electronics Service Center, and exchange it as the following instruction since its lifetime has been terminated.

***Caution**

Use either the remote controller or the power button to turn off the Monitor. When the green light turns into a red light, unplug the power cord from the outlet and exchange the lamp after 60 minutes of waiting period, If the lamp is replaced during its operation, or afteran immediate turn off, the lamp is overheated; thus, it may result in burning and serious injury.

- Do not remove any screw except the ones indicated.
- Do not touch the protection glass of the lamp since it may minimize the screen brightness capability or cause shortage in its lifetime.
- Shattering of the lamp may occur if it is used for an extremely long period of time .
- Change the air filter when replacing the lamp.



Turn off the Monitor set.

- Use either the remote controller or the power button to turn off the Monitor. When the power is off, the unit will stand by momentarily for cooling.
- Wait until the power lamp at the front panel turns red.



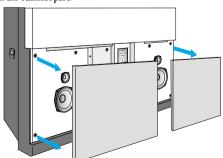
Disconnect the Unit Completely.

• When the cooling process of the lamp ends, unplug the power cord from



Pull off the Speaker Grill at the Front Panel.

• Refer to the illustration provided below. Pull off speaker grill at the front panel. Begin taking off from the outmost part.

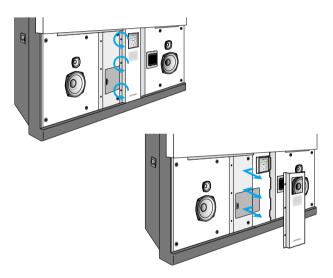


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Detach the Front Controller Panel

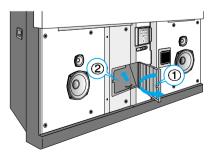
• Loose three screws at the left-hand side with a (+) driver, and separate the front controller panel from the unit.





Open the Door

• Pull off the door 1, and then, pull up the door 2 to open as below.

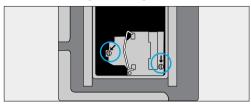






Loose Two Screws of the Lamp.

• "Use a (-) driver to separate the lamp from the unit.





Exchange the Lamp

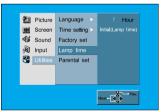
• Exchange the lamp and re-assemble in the opposite sequence.



Reset the Lamp Timer



- Plug in the power cord into the outlet, and turn on the Monitor set either using the remote controller or the Power button.
- \bullet Please select "Utilities" \to "Lamp time" \to "Initial (Lamp time)" and reset the lamp time.



***Caution**

- The doors ① and ② must be closed firmly for the proper functioning of the Monitor set,
- You must reset the "lamp time" when you replace it.

LCD PROJECTION - MONITOR

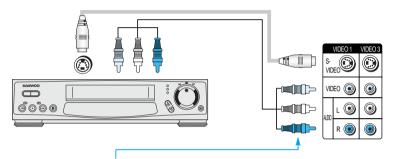
Glossary

Term	Explanation
Multimedia	May enjoy varieties of broadcasting programs by connecting with PC, DTV and DVD.
External Input	May connect with any input-such as Video, Camcorder, Playstation, DVD-other than MONITOR broadcasting.
A/V Socket	Video socket in Yellow, and Audio socket divided in White and Red(R,L); used for external input connection.
S-Video	May view with a higher picture quality than in normal Video.
DVD	Called Digital Video Disk, or Digital Versatile Disk, Extremely high in Audio/Video quality. May view connecting the DVD player with the Component input jack in the Monitor.
DTV	Monitor that permits viewing digital broadcasting programs. When connected to a Set Top Box, it allows the clearest and highest quality viewing of digital display.
Video Output	Socket of the Video output that is currently running.
Audio Output	Socket of the audio output that is currently running.

Video Connection

Connecting with an External Source

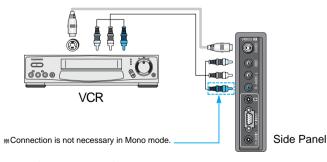
You may connect S-Video input to enjoy a clearer and brighter picture images. You can choose and make the connection with any one of Video 1,2, or 3 inputs.



Connect either S-Video or Video input to the unit. When both are connected, the output display will be in S-Video.

Connecting with an side panel

You may connect S-Video input to enjoy a clearer and brighter picture images. You can choose and make the connection with VIDEO2 input(side panel).



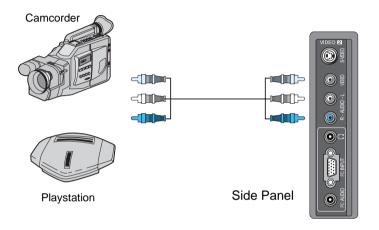
 Connect either S-Video or Video input to the unit. When both are connected, the output display will be in S-VHS4.

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Camcorder & Playstation Connection

Watching the Camcorder Recording on Monitor

-Use the input jack provided at the side panel of the MONITOR set
-Use the same connection method for playstation



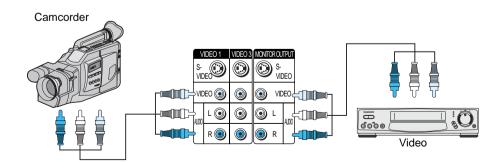
Playing a Recorded Material and Recording a Video simultaneously

-Connect the camcorder and video as follows.

-Turn the camcorder's video output switch on, and play the recorded material.

-Press the "VIDEO" button, and select VIDEO1 Input.

-Then start recording for VCR.



DVD Connection

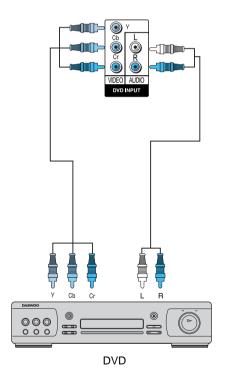
DVD

-480i, 576i input signal is possible for DVD input.

- -DVD screen output is composed of three separate primary color jack(Y/Cb/Cr), resulting in a higher image quality.

 -Y/Cb/Cr, may also be noted as Y/PB/PR or Y/Pb/Pr in different DVD players.
- -The DVD player's audio output must be connected to the DVD audio input socket at the back of the Monitor set.
- -You must use a 480p, 576p input capable component1 jack if you want to get the progressive scan (480p, 576p)

 DVD screen display.

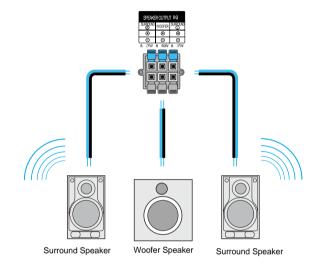


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Audio Connection

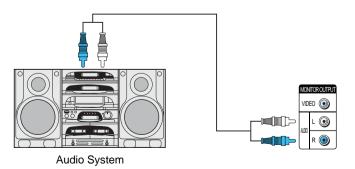
Surround Speaker Connection

Feel the realism with the surround sound effect!



Standard Audio Connection

- -You may minimize the volume of the Monitor set, and listen to the sound.
- -The default status of "Dolby sound" is in "Line out: Internal".
- -Connect the Audio system to the monitor of the Monitor set. Then, press <Menu>--<Sound>--<External set> to listen, and select "Line out:External".



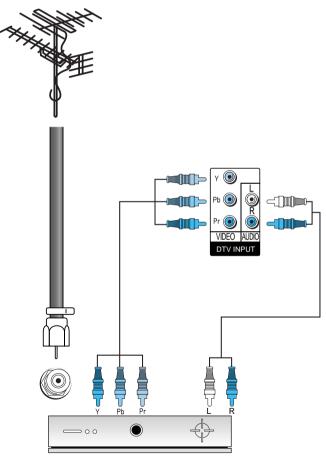
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Digital Satellite Receiver Connection

Watching High Definition Digital Broadcasting

The signal input of 1080i, 720p, and 480p are available in this product.

You may use a general A/V jack for its connection.



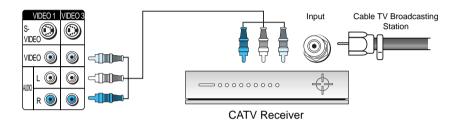
Digital Satellite Receiver

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Cable TV Broadcasting Connection

External Input Connection Source

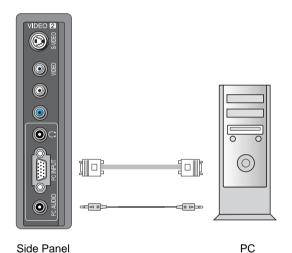
Watching cable television is only possible after you have subscribed to the local broadcasting company and installed a cable receiver. You may make the connection to any of the Video input 1, 2, 3.



Personal Computer Connection

Watching PC on Monitor

No additional appliance is necessary to watch the PC screen on the Monitor. When connecting with the PC, use the input jacks provided at the side of the Monitor. PC, audio, and any other related connection cable must be purchased additionally.



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RESOLUTION SUPPORTED

The standard screen is wide.

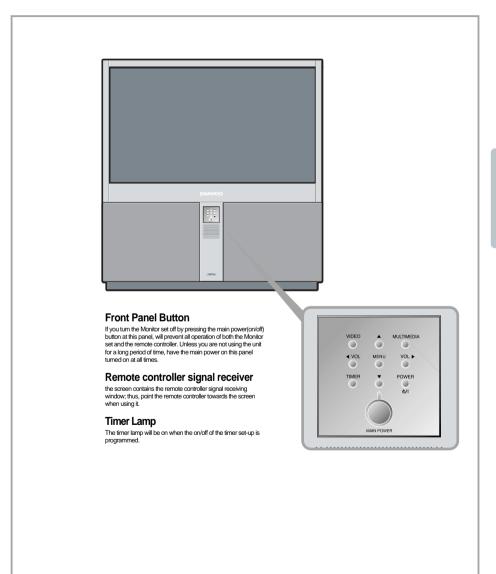
Resolution	Horizontal frequency	Vertical frequency	Remarks	
640 ×350	37.861	85.1	VESA	
640 400	24.823	56.4	NEC	
640×400	37.861	85.1	VESA	
	35	66.7	Macintosh	
	37.861	72.8	VESA	
640 ×480	37.5	75.0	VESA	
	39.375	75.0	IBM	
	43.269	85.0	VESA	
720×400	37.927	85.1	VESA	
	35.156	56.3	VESA	
	37.879	60.3	VESA	
800×600	48.077	72.2	VESA	
	46.875	75.0	VESA	
	53.674	85.1	VESA	
832×624	49.726	75.1	Macintosh	
	48.193(48.077)	59.3(59.8)	Macintosh(OAK)	
	48.363	60.0	VESA	
4004 700	56.476	70.1	HP&VESA	
1024 ×768	60.241	74.9(74.6)	Macintosh	
	60.023	75.0	VESA	
	68.677	85.0	VESA	
	63.851	70.0	VESA	
1152×864	67.5	75.0	VESA	
	77.094	85.0	VESA	
1152×900	61.769	66.0	SUN	
1152 X 900	71.713	76.0	SUN	
	60	60.0	VESA	
1280×960	75	75.0	VESA	
	85.938	85.0	VESA	
	46.433	43.4	VESA	
	63.981	60.0	VESA	
1280×1024	78.125	72.0	HP&HITA	
1200 X 1024	78.855	74.1	Sony&NEC	
	79.976	75.0	VESA	
	91.146	85.0	VESA	
	62.5	48.0	VESA	
	75	60.0	VESA	
	81.25	65.0	VESA	
1600 ×1200	87.5	70.0	VESA	
	93.75	75.0	VESA	
	100	80.0	VESA	
	106.25	85.0	VESA	

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Name of Each Part

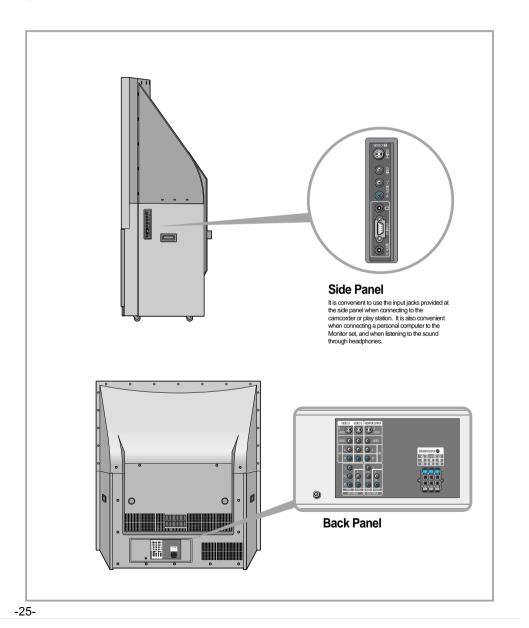
Front Panel

Buttons on the Monitor set have the same function as those of the remote controller.



LCD PROJECTION - MONITOR

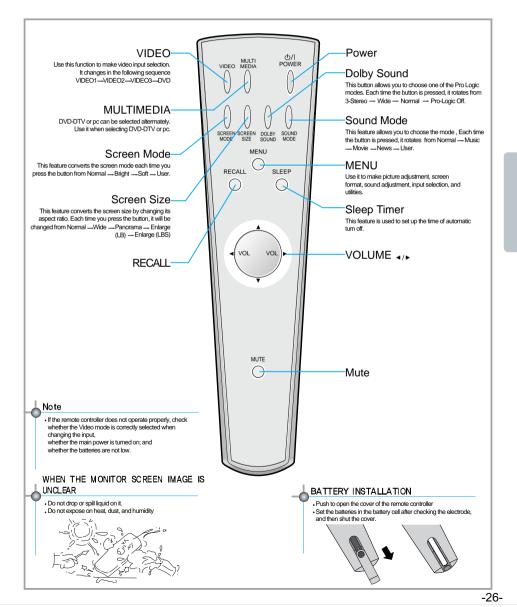
Side and Rear Panel



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Rermote Controller Guide

Parts of the remote controller



LCD PROJECTION - MONITOR

Basic Menu Guide

Basic Menu

When the "menu" button is pressed, the basic menu window will appear on the screen. It contains a list of 5 entries-Picture, Screen, Sound, Input, Utilities. Furthermore, each entry contains its pertinent sub-items, and when an entry is selected, a list of its sub-items will appear at the right.



Displaying the main menu

 When the menu button is pressed, the basic menu will appear.





Selecting an item



- Press the "▲/▼" button to select on the item. Follow the instructions on the screen to set up.
- When the setting is done, press the "menu" button to close the window.
- The menu window will automatically disappear if not closed after an approximate time of 8 seconds





 The window below the main menu where states "move, previous, next, select" changes its color, and helps to recognize currently selected menu.



Picture

Its sub-items are Brightness, Contrast, Sharpness, Color, and Tint.

Dolby Sound, and External set.



Screen

Its sub-items are Screen Size, Screen Mode, and Adjustment (PC/DTV)



Sound

Its sub-items are Sound Mode, Equalizer, Dolby Pro Logic, Sound Balance,



Innu:

Its sub-items are Input select, VIDEO1, VIDEO2, VIDEO 3, DVD, DTV and PC.



Utilities

Its sub-items are Language, Time setting, Factory set and Lamp Time.

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To watching Monitor

Turning on the Monitor

Buttons on the Monitor set have the same functions as those of the remote controller.

Turning on the Monitor set.



Monitor

• Plug the power cord to the outlet and press the main power at the front controller panel.

· A red lamp will light up.



Operating the Monitor set.

• Press the power button on the remote controller or on the Monitor set.

 $_{\mathsf{POWER}}$ $_{\mathsf{POWER}}$ • When the main power lamp flickers on green, the screen will gradually turn on. During this instance, the power button will not operate.

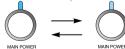
When the process is completed, the main power lamp lights on green



*It is LCD-Projection Monitor characteristics that it takes a little while for the video to be displayed on the screen when it is turned on. This is not malfunctioning; thus, please be patient and wait for a moment.

*The degree of brightness will decrease insignificantly after 3 minutes is passed. This is not a breakdown; it is only using a power saving process to maximize the lamp's lifetime.

*When the power buttons are pressed, the main power lamp may flicker in green, but the secondary power lamp may flicker in red and orange alternately. In this case, the Monitor's main power has been erroneously pressed, or has been turned off improperly by a power stoppage or by any other reason. However, please wait for an instant, and the Monitor will be back on (the latest 1min. 30sec.) since this is not a malfunctioning of the product.



When the Main Power button is pressed, and the Monitor does not turn on: Please check the following list before calling for a service

Timer On/Off and the main power lamp flickering in red: Please check whether the air filter and lamp cover is properly fixed

- (%Timer On/Off and the main power lamp flickering in red and grange alternately; There must be a problem with the lamp. You may have to change the optical lamp or call for service. (For the lamp exchange, please refer to page 12 of the manual) (3)Timer On/Off and the main power lamp flickering in orange: There must be a problem in the cooling fan. Please call for
- (4)The main power lamp flickering in orange: The product is overheated and its temperature is extremely high for some reason Please check if the slots and openings of front and rear panels are blocked impeding its ventilation or if the filter is full of dus' and needs some cleaning. After checking them, press the power button on the remote controller or the one on the Monitor set to turn on the Monitor and operate again

LCD PROJECTION - MONITOR

Turning off the Monitor

The lamp's lifetime may be reduced if the Monitor set is not turned off properly. Please read the indications carefully, and power it off as instructed in this manual.



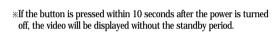
Turning off the Monitor set.







- Press the power button on the remote controller or that of the Monitor
- Audio and Video will be turned off and the main power lamp will flash in green at this time. This is not malfunctioning nor an error; it is just a process of cooling the lamp off. During this time, the power button will not operate. A red light will light up after a minute.





Checking proper shut down



 Please have the main power on at all times, except when the unit is not used for a long period of time. Press the power button when the main power light is in

Improper turning off of the Monitor set may cause a damage to the lamp.

PRESS THE MAIN POWER BUTTON AT THE FRONT CONTROLLER PANEL

. You must press and turn on the mair power button for the remote controller and the function keys on the Monitor set to operate. If the main power is turned off, neither the remote controller nor the function keys on the Monitor set will operate

TO TURN THE SOUND OFF

- . Press the "mute" button
- 2. The sound will be off if the screen displays "muting"
- 3. 'When the "mute" button is pressed once more, the sound will be back on. For example, use this feature when there is a telephone call or when there

WHEN THERE IS A SUDDEN SOUND WHILE WATCHING OR AFTER

 There is no damage caused to the Monitor set if there is no distortion on the screen image or affect on its sound quality. This may happen when the cabinet is compressed by the internal temperature change.

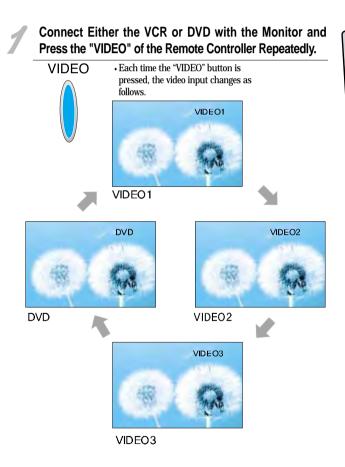
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Watching VCR

Watching VCR

Please refer to the connection guide of Monitor to external input provided at the page 15~21.

The input may be selected by pressing Menu — Input → Input select





LCD PROJECTION - MONITOR

Watching DTV or PC

Watching DTV or PC

This feature may be selected by pressing Menu → Input → Input select



Connect Either DTV or PC with the Monitor and Press the "MULTIMEDIA" Button on the Remote Controller.

MULTI MEDIA Each time the "MULTIMEDIA" button is pressed, DTV or PC input changes as follows.



DTV







PC:

If the connection has not been established,
 "No signal! Please check input signal or press
 "VIDEO1" key or "MULTIMEDIA" key, will be
 displayed on the screen.

Screen Adjustment of DTV or PC

This feature is only available when there is DTV or PC input. It provides information on the resolution and frequency, and helps adjust its positions.



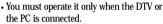
Displaying the Menu.



• Press the "menu" button



• The following menu will appear on the screen







Selecting an Entry.



Select the "Screen" pressing the "▲/▼" buttons
 Press the "Vol ▶" button.



 When the "Vol ▶" button is pressed, an extended menu will be displayed on the screen





LCD PROJECTION - MONITOR

Adjusting Screen Format.



- Select "Adjustment" with "Vol ▲/▼" buttons
- When the "Vol ▶" button is pressed, a gauge menu will be displayed on the screen.
- Use the "Vol **◄**/ ▶" buttons to format the screen.
- **The screen's horizontal and vertical sizes can only be adjusted in the "Wide" size of the PC input.





Exiting Screen Format.



• Press the "menu" button until the menu window disappears.



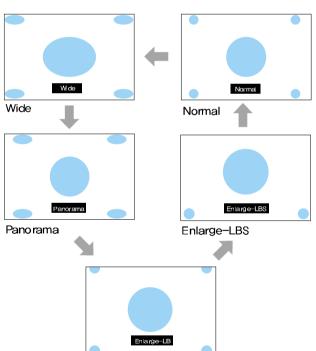
TO VIEW THE INFORMATION ON THE RESOLUTION AND THE FREQUENCY, PRESS THE "RECALL" BUTTON ON THE REMOTE CONTROLLER. YOU MAY VIEW THIS INFO BY PRESSING MENU — UTILITIES — RESOLUTION.

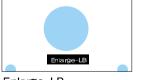
Screen Size Adjustment

You may change the screen size at your preference. It is more entertaining and fun watching Monitor. You may adjust it by pressing Menu → Screen → Size.

Selecting Screen Size.

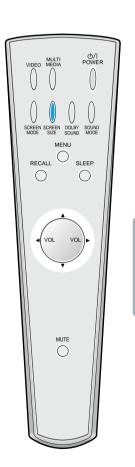
- · Press the "Screen Size" button.
- SCREEN
 - · The size and the aspect ratio of the screen that you are currently watching will be changed.
 - Each time you press the button, it will be changed as follows: Wide → Panorama → Enlarge - LB → Enlarge - LBS → Normal





Enlarge-LB

- · Wide: With the screen of 16:9 aspect ratio, you can feel the exceptional sensation that you may can only feel
- Panorama: 4:3 ratio is enlarged to 16:9, while remaining the centered object as is keeping it natural.
- Enlarge LB: Enlarge the image as is
- Enlarge LBS: Enlarges the screen, and places the caption on the image in case you are watching Video with
- Normal: Currently broadcasting normal Monitor screen size



LCD PROJECTION - MONITOR

Screen Mode Adjustment

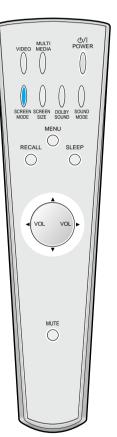
You may select the screen mode already provided by the factory at your preference without going through the adjustments yourself.

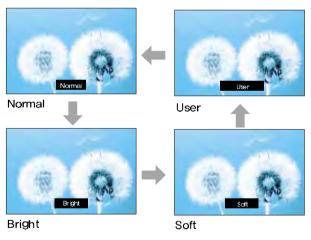
You may make the selection by pressing Menu → Screen → Mode.

Selecting Screen Mode.



- · Press the "Screen Mode" button.
- Each time you press the button, it will be changed as follows:
- · Adjust the brightness, contrast, and sharpness on each screen mode, and you will be automatically on the "user" screen.
- · Adjustment is possible in each "VIDEO" mode.





- Normal: Initially set-up mode. Use it when the surrounding is bright.
- Bright: You may enjoy a brighter and a clearer picture image.
- Soft: It makes your eyes less tired even watching video for a long-term
- User: You adjust the screen and customize it at your preference.

However, when the Input is in PC, only "Normal" and "Movie" modes are available.



· Normal: Initially set-up mode.

• Movie: You may enjoy natural picture images when watching Video with PC connection.

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Making Picture Adjusting

You may adjust the brightness, contrast, sharpness, color and tint at your preference.

BRIGHTNESS

 Adjusts the degree of brightness or darkness of the whole screen

CONTRAST

 Adjusts the degree of brightness and darkness of the objects with the background of the picture.

SHARPNESS

 Adjusts the shapes of the objects providing a clearer and softer image.

COLOR

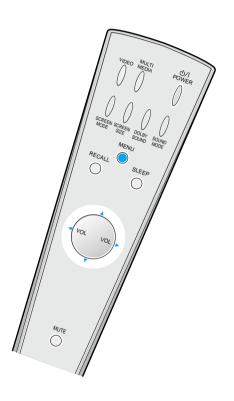
 Adjusts the degree of the color saturation

TINT

- Adjusts and reproduces a person's skin color most naturally.
- Tint adjust ment is available in NTSC signal and DTV mode only.

IN PC INPUT

 Brightness, Contrast, and Sharpness are the only three adjustments available.



Displaying the Menu.

- Press the "menu" button
- The following menu will be displayed on the screen.



LCD PROJECTION - MONITOR

Viewing the Sub-Menu.

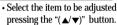


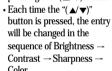
- Press the "(▲/▼)" buttons and select "picture"
- When "Vol ▶" button is pressed, an extended menu window will appear.
- Select the sub-item to be adjusted with the "(▲/▼)" button once again.
- When "Vol ▶" button is pressed, an gauge menu will be displayed on the screen.



Making Adjustment.









When Adjusting the Color.



- Select "Color" pressing the
- "(**▲**/**▼**)" buttons



- Adjust the "color" with "Vol ◀/▶" buttons.
- You may adjust
 Brightness, Contrast and
 Sharpness, with the same
 method.



Exiting Picture Adjustment.



 Press the "Menu" button until the menu window disappears from the screen.



Sound Adjustment

Adjusting the Sound Mode

· You may select the sound mode already provided by the factory at your preference without going through the adjustments yourself.

• You may have this selection by pressing Menu → Sound → Mode.

Selecting Sound Mode.



- Press the "Sound Mode" button.
- · Each time you press the button, it will be changed in the sequence of "Normal" → "Music" \rightarrow "Movie" \rightarrow "News" \rightarrow "User" mode.



*The Sound Mode cannot be adjusted when Dolby Pro Logic is selected.

NORMAL

· Generally, it is good to hear all type

MUSIC

·It provides the most harmonic sound with its bass and treble when listening to the music.

MOVIE

. Sound effect is extremely rich, and gives you a real sensation when watching a movie.

NEWS

· The speaker's voice is accentuated and it is moderate when watching news and documentary programs.

USER

· you adjust the sound quality and customize it at your preference.



LCD PROJECTION - MONITOR

Using Equalizer

You may adjust the equalizer provided and enjoy the sound quality at your preference. Either high or low tone may be diversely adjusted as the way you want it.



WHAT IS AN EQUALIZER?

- This feature is a function that provides a range of sound adjustment used on the audio products.
- 120Hz, 500Hz low-pitched tone 1 KHz, 5 KHz - moderate tone 10 KHz - high-pitched tone

WHEN THE EQUALIZER ADJUSTMENT DOES NOT OPERATE

- The equalizer cannot be used for sound mode adjustment when the "Dolby Pro Logic" mode is on
- You may adjust the sound mode by first selecting "Pro Logic Off" with the "Dolby Sound" button on the remote
- You may select this by pressing Menu - Fourmay select this by pressing Mer -- Sound -- Pro Logic -- Pro Logic Off.

Displaying the Menu.



- · Press the "menu" button.
- · The following menu will be displayed on the screen





2

Making "Sound Adjustment"



- Select "Sound Adjustment" pressing the "▲/▼" button.
- When the "Vol " button is pressed, an extended menu will appear.



Using Equalizer



- Select "Equalizer" pressing the "▲/▼" buttons.
- When the "Vol ▶" button is pressed, an extended menu will appear.

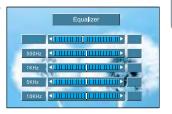


4

Viewing Sound Range.



- Press the "Vol ▶" button and select the sound range to be adjusted.
- Select the item to be adjusted pressing the
- adjusted pressin "▲/▼" buttons.

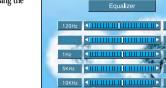


LCD PROJECTION - MONITOR

When Adjusting to "500Hz"



- Select "500Hz" pressing the
- "▲/▼" buttons.



Adjusting Sound Range.



- Select the sound range using the "Vol ◀/▶" buttons.
- •Adjust the sound range in the same method.
- •The sound range of the equalizer adjustment is -32~32



Exiting Sound Adjustment.



 Press the "Menu" button until the menu window is disappeared from the screen.

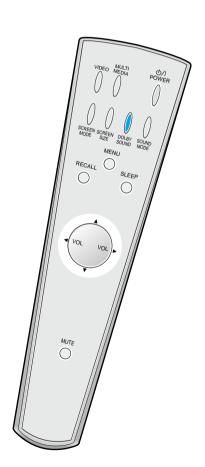


Dolby Sound

The original sound system has been improved, and you may hear three-dimensional, Dolby Pro Logic sound.

You may have this selection by pressing

<menu>
--<Sound>
---<Pro-Logic>



3-Stereo

 You may listen to surround sound with the YR speakers without connecting it with surround speakers.

Wide

 It is the same state as normal, but bass is included in the center for a magnificent sound.

Normal

- You can enjoy the clearest, and the purest three dimensional Dolby sound through the YR speakers.
- speakers
 If you connect the surround speakers and wooter, you can enjoy the original Dolby surround sound.

Pro Logic OFF

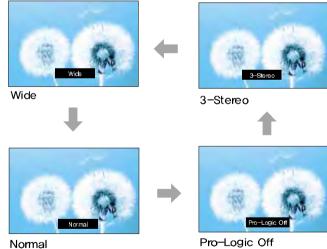
It is the normal state when Dolby sound mode is off.

LCD PROJECTION - MONITOR

Choosing Dolby Pro Logic



- Press the "Dolby sound" button.
- Each time you press the button, it will be changed in the following sequence
- It may be adjusted by pressing Menu → Sound → Pro-Logic



Speaker Sound Adjustment

You may adjust the Speaker sound by pressing Menu → Sound → Dolby Sound(or Sound Balance)

**Dolby Pro Logic related sound adjustment cannot be done when the "Pro Logic Off" mode is on.

**Noise sequencer: When you select Menu → Sound → External set → Noise sequencer, you will hear "noise tone" in sequence from left to center to right to surround speakers.

BALANCE

 This function balances the sound of the left and right speakers

SURROUND BALANCE

 This function balances the sound between the SL and SR

CENTER VOLUME

 This function balances the Center Speakers' volume

SUB-WOOFER

This function balances the sound of the external woofer volume.

SURROUND VOLUME

 This function balances the external surround speakers' volume

HEADPHONE

 This function balances the headphone volume.

Displaying the Menu.

MENU

• Press the "Menu" button.

· The following screen will be displayed.





Choosing "Sound"

MENU

- Select "Sound" pressing the "(▲/▼)"buttons.
- When the "Vol ▶" button is pressed, an extended menu will appear on the screen.







LCD PROJECTION - MONITOR

Choosing on Entry



 Select the entry to adjust pressing the "Vol ◄/▶" buttons.



When adjusting the "Surround Balance"



- Select "S-Balance" pressing the " $\triangle/ \blacktriangledown$ " buttons.
- •When the "Vol ▶" button is pressed, an extended menu will appear on the screen.



Making Adjustment.



 Adjust "S-Balance" pressing the "Vol ◀/▶" buttons..



• You may select and adjust the Balance, Sub-woofer volume, Surround Volume, and Center Volume, in the same method by pressing the "(△/▼)" buttons.



Exiting Sound Adjustment.



 Press the "Menu" button until the menu window disappears from the screen.



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Using the Memory Feature

Time Setting

SCREEN SCREEN DOLBY SOUND

SLEEP

This feature makes the Monitor turn on automatically at a certain time that you set-up. You must set-up the current time before utilizing this memory feature.

Displaying the Menu.



- Press the "menu" button
- The following menu will appear on the screen



Viewing the Sub-Items.



- · Select "Utilities" using the " ▲/▼" buttons
- When the "Vol▶" button is pressed, an extended menu will appear on the screen.



Choosing "Time Setting"





· Select "time setting" pressing the "▲/▼" buttons



CHECKING ON/OFF TIME SET-UP

 When On/Off time is set-up. a red light will light up on the "timer" lamp.

MUTE

· Lither you set-up one of the above options, the "timer" lamp will still be on.

Viewing Extended Menu



• When the "Vol ▶" button is pressed, an extended menu will appear on the screen.



DO NOT TURN THE MAIN POWER OFF.

"When you press down the main power button, then the current time will be automatically deleted. Consequently, the function On/Off will not operate even though you set up the time if the current time is

LCD PROJECTION - MONITOR

Selecting "Current Time"



- •The word "Current Time" will turn into light blue Press the "Vol ▶" button and select "hour". The word "hour" will turn into vellow. Press the
- "▲/▼" buttons to adjust the time.
- Press the "Vol ▶" button and select "minute" as you have done above. The word "minute" will turn into yellow, and at this time, press the "▲/▼" buttons and adjust the minutes.



Choosing "on time" or "off time"



- You may select either "On time" or "Off time" pressing the "Vol▶" button after you had set up the current time.
- When "On time" is selected, the word "On time" will turn into light blue.



When Adjusting "On time"



- Use the "▲/▼" buttons to select "Utilities"
- Press the "Vol ▶" button and select "hour" when the word "On time" is in light blue. The word "hour" will turn into vellow.
- When the "▲" button is pressed, the number will
- When the "▼" button is pressed, the number will
- decrease. · Use the same method to adjust the minutes.
- ·Use the same method to set -up "Off Time"
- •If you want to turn the "On Time/Off Time" option off, use the "▲/▼" button to change the set-up to "off"



Exiting time setting



- · Press the menu button until the menu window disappears from the screen.
- •The 'Timer" lamp will light up red when the setting has been completed.



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Setting "Sleep Timer"

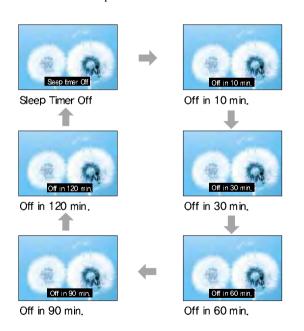
This feature permits the unit to turn off automatically after 10 to 120 minutes depending on the time you set-up



Using Sleep Timer



- Press the "Sleep" button.
- Each time the "Sleep" button is pressed, the menu will change in the following sequence: "Sleep-timer off" → "Off in 10 min." → "Off in 30 min." → "Off in 60 min." → "Off in 90 min." → "Off in 120 min." repeatedly.
- Stop pressing the button at the time period that you want to set up.



**PRESS THE "SLEEP" BUTTON TO VIEW THE TIME WHEN THE MONITOR WILL BE TURNED OFF.

*IT WILL AUTOMATICALLY DISPLAY THE TIME ON THE SCREEN 3 MINUTES BEFORE THE MONITOR TURNS OFF. (HOWEVER, IT WILL NOT DISPLAY WHILE MAKING ANY OTHER ADJUSTMENT)



LCD PROJECTION - MONITOR

Adjusting to "Factory Set"

Select Menu → Utilities → Factory Set



Adjusting to the Factory set



 You may enjoy the optimum picture and sound by selecting Menu → Utilities → Factory set.



Checking "Lamp Time"

• Select Menu → Utilities → Lamp Time You can view the accumulated lamp usage time.



When Changing the Lamp



 You must reset "Initial(Lamp Time)" by selecting "Utilities"→ "Lamp time" at the menu



**Do not reset the "Lamp Time" without exchanging the lamp with a new one.
If the "Lamp Time" is reset without the lamp actually changed, the accumulated time used will display 0 hour, and the actual time used cannot be viewed.

Selecting the On-Screen Language

The language of the program on the screen can be changed to one of the following On-Screen languages: English, Spanish, French, Portuguese, Dutch, Italian, and Russian.



Press the "Menu" button



• The following screen will be displayed.







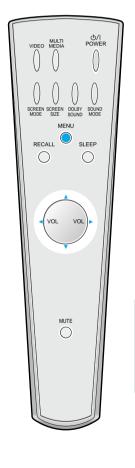
Select "Utilities" by pressing the Up/Down buttons.

 \bigcirc



- · Select "Utilities" by pressing the "▲/▼" buttons.
- When the "Vol ▶" button is pressed, an extended menu window will appear.





LCD PROJECTION - MONITOR



Select "Language"



- · Select "Language" by pressing the "▲/▼" buttons.
- When the "Vol ▶" button is pressed, an extended menu window will appear.
- · Select "On-Screen Language" you want to be displayed by pressing the "▲/▼" and "Vol ▶" buttons.





Exiting On-Screen Language



• press the "menu" button until the menu window disappears.



Troubleshootings

Symptoms and Solutions

Please check the following list prior to calling Nec Service Center for assistance

WHEN THE MONITOR DOES NOT TURN ON



- plugged into the outlet
- Please check the power cord and connect it properly to the
- · Press the main power button at the front controller panel.

WHEN THE IMAGE IS DOUBLED



• Turn the antenna towards where the broadcasting station

WHEN THE VIDEO IS ON. BUT THE AUDIO IS OFF



- remote controller been pressed accidentally?
- · Have you checked its volume?
- . Press the "mute" button on the remote controller once more.
- · Adjust the volume pressing the
- " > " button

WHEN DOTTED OR WHITE LINES ARE ON



- · Have you checked the antenna?
- Have you checked whether it has been interfered by vehicles or neon signs?

WHEN THE AUDIO IS ON . BUT WHEN THE IMAGE IS NOT IN COLOR



- · Have you checked the Color?
- . Isn't the program itself
- broadcasting in black and white?
- · Have you checked the antenna
- · Adjust the color pressing the
- "▲/▼" buttons as explained in
- page 36
- · Check other broadcasting programs

WHEN THE REMOTE CONTROLLER DOES NOT WORK



- · Hasn't the remote controller receiving window be blocked or interfered by any object?
- · Aren't the batteries on the remote controller low?
- Hasn't the remote controller mode set up in cable mode?

LCD PROJECTION - MONITOR

Specifications

Model	NRP-60LCD1	
Screen size	60"(diagonal), 16:9 Aspect ratio	
Broadcasting	HDTV Ready	
	World - Wide System(PAL/ NTSC/ SECAM)	
Sound System	Dolby Pro Logic, R(10W), L(10W), Center(7W)	
Power Requirement	100 − 240V~ ,50/60Hz	
Power Consumption	270W	
Dimension(W/H/D)	1381 x 1420 x 567mm	
Weight	85.5kg	
Inputs/Outputs	Rear	
	NTSC/PAL/SECAM A/V In (S-Video/Video/L/R)	2each
	NTSC/PAL/SECAM A/V Monitor Out (Video/L/R)	1each
	HD Component In (Y/Pb/Pr/L/R)	1each
	DVD Component In (Y/Pb/Cr/L/R)	1each
	SPEAKER Output Terminal (SL/SR/Woofer)	1each
	Side	
	NTSC/PAL/SECAM A/V In (S-Video/Video/L/R)	1each
	Headphone (L/R)	1each
	PC In (15Pin D-Subjack/L/R)	1each

Although the LCD panel uses highly precise technology, it may display blank pixels, dark spots or lighting pixels on the screen. This is normal and not an indication of a defect

NEC Service Centres



NEC Australia Pty. Ltd. ABN 86 001 217 527

Home Electronics Group

NEC Service Centres

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NHVV	2011	tn v	vai	68

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 (02)9780 8688

 Newcastle
 120 Parry Street, Newcastle 2302
 (02)4926 2466

Victoria Melbourne

480 Princes Highway, Noble Park 3174 (03)9554 6245

Queensland

Brisbane 116 lpswich Rd, Woollongabba 4102 (07)3361 5858 Southport Shop 1, 48 Ferry Rd, Southport 4215 (07)5591 3670

South Australia

Adelaide 84A Richmond Rd, Keswick, 5053 (08)8375 5710

Western Australia

Perth 45 Sarich Court, Osborne Park 6017 (08)9445 5901

For Service in outer areas, please contact your NEC retailer for the address of the nearest Authorized NEC Service Centre.

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